European GIS-T Projects

Hans Hinsch
Business Development Manager Transportation

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Agenda

GeoMedia

- **European Corridors**
- **Solution Approach**
- **Examples**
  - **Germany**
  - **Croatia**
  - **Romania**

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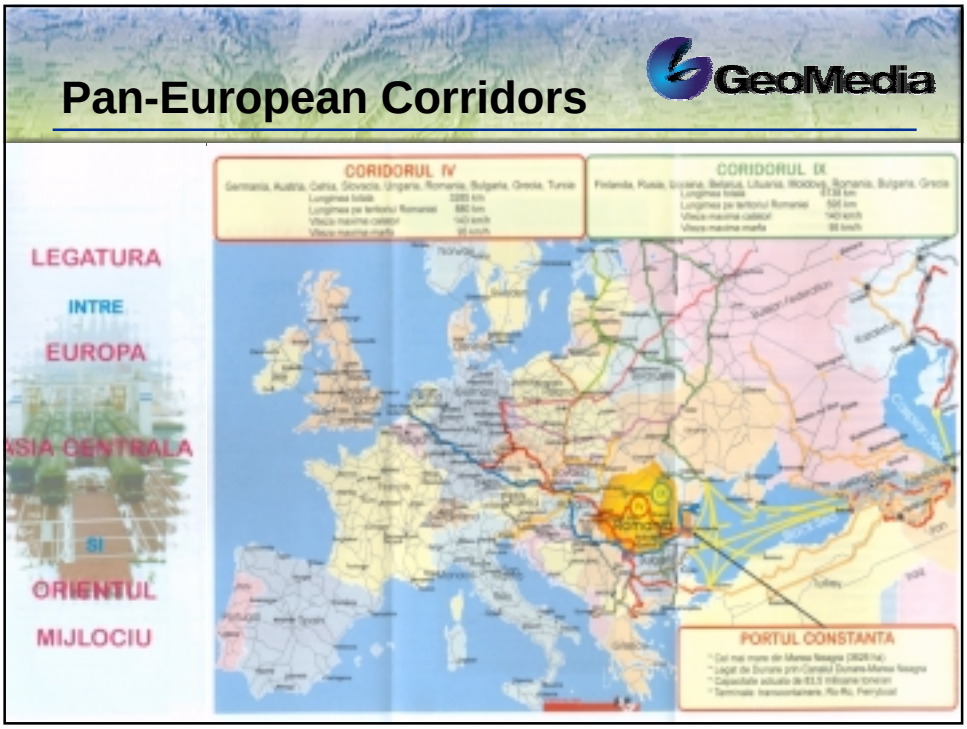
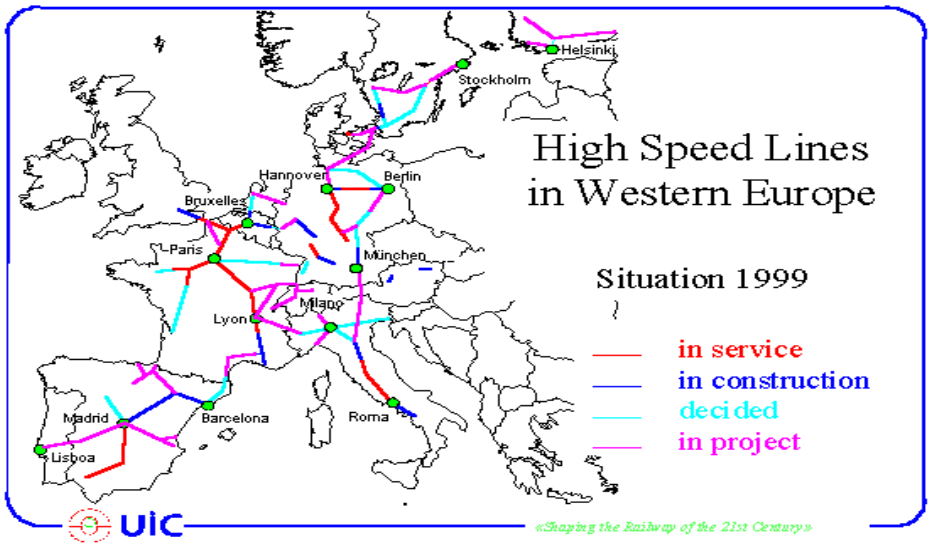
Pan-European Corridors

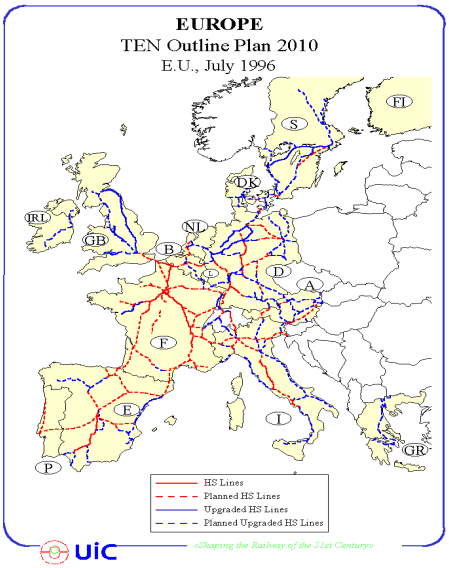


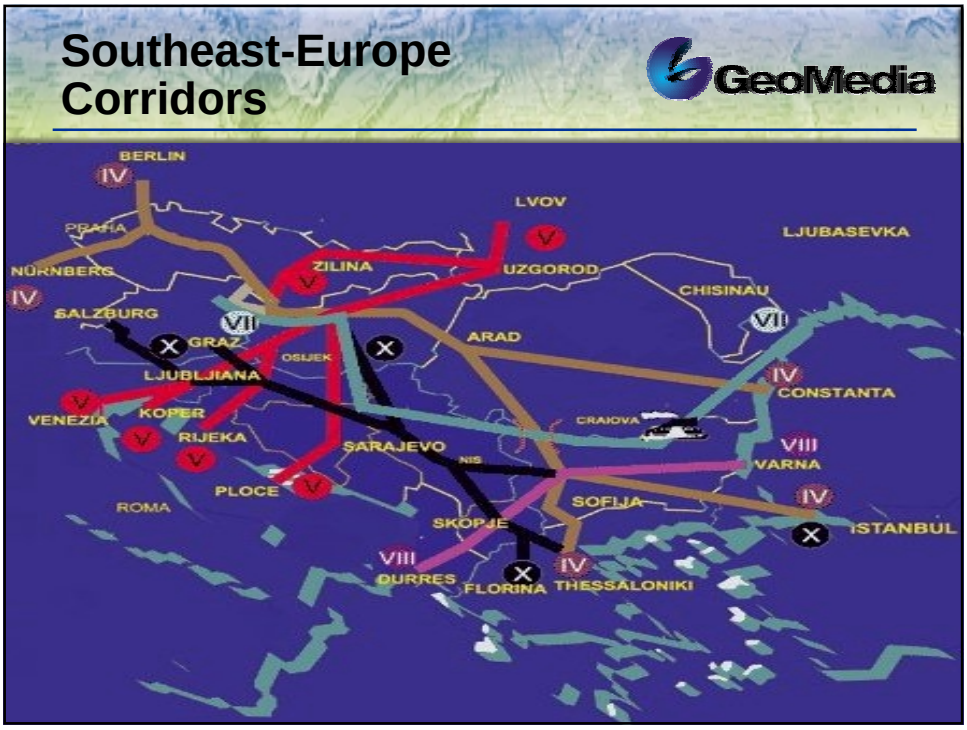
Pan-European Networks

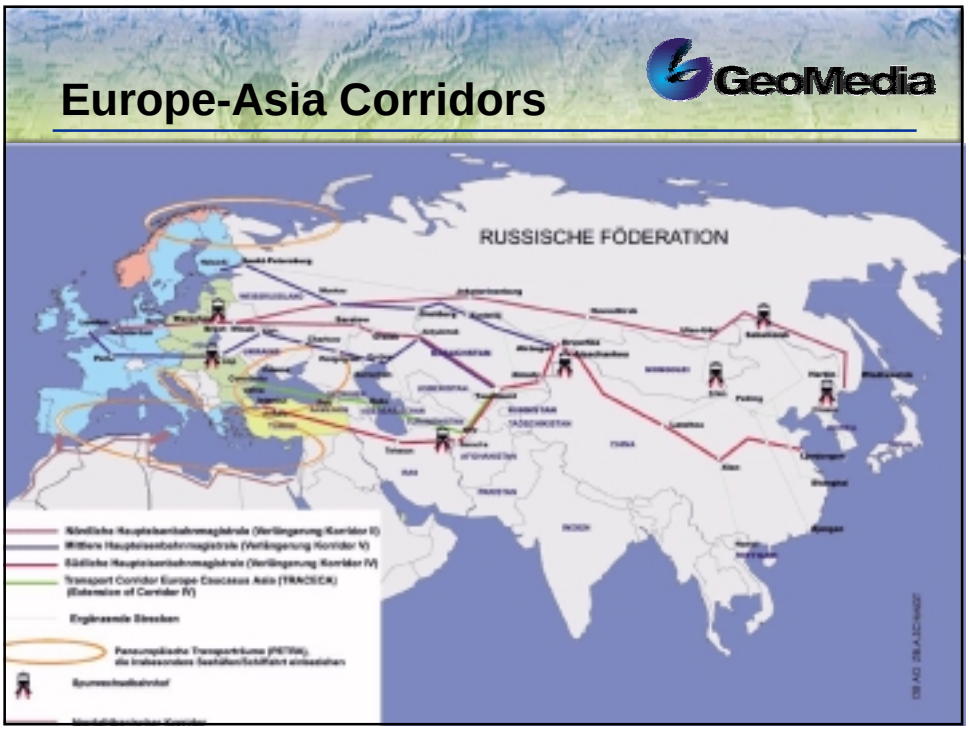
Western Europe Highspeed Railway Lines



Year 2010 – Trans-European Network




Southeast-Europe Corridors
GeoMedia
BERLIN
IV
PRAHA
NÜRNBERG
IV
SALZBURG
VII
GRAZ
LJUBLJANA
V
VENEZIA
KOPER
V
RIJEKA
V
PLOCE
V
ROMA
ZILINA
V
LVOV
V
UZGOROD
OSIJEK
X
ARAD
SARAJEVO
NIS
SKOPJE
VIII
DURRES
X
FLORINA
IV
THESSALONIKI
LJUBASEVKA
CHISINAU
VII
IV
CONSTANTA
CRAIOVA
VIII
VARNA
IV
SOFIJA
X
ISTANBUL


Europe-Asia Corridors
GeoMedia
RUSSISCHE FÖDERATION

Intercontinental Corridors

GeoMedia

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US ISTEA / NHS / TEA-21 Corridors

GeoMedia

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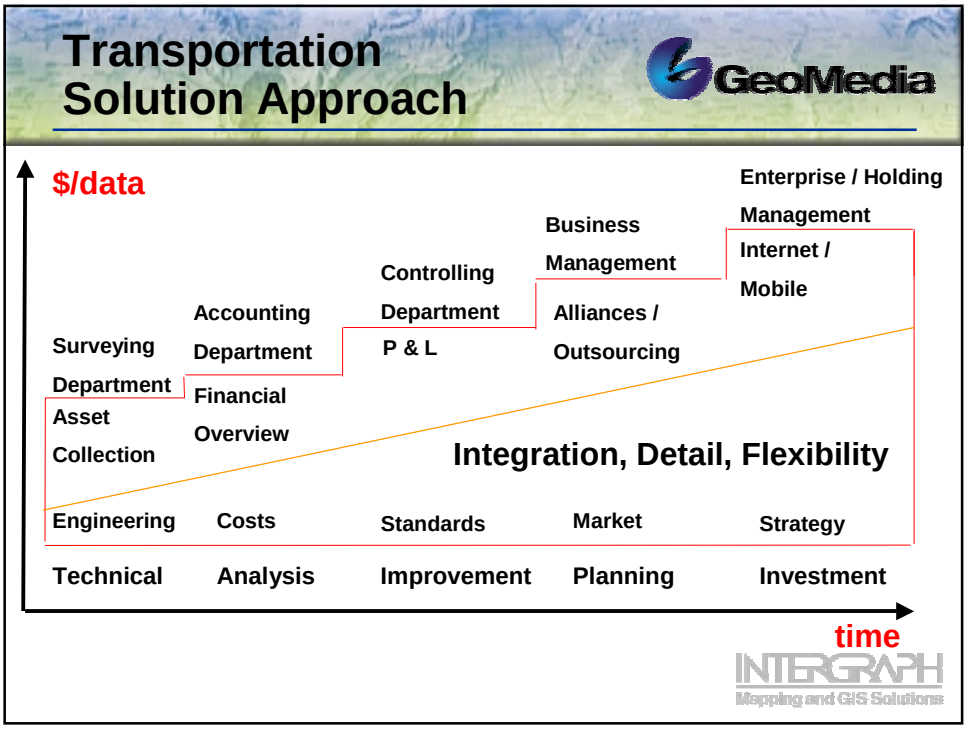
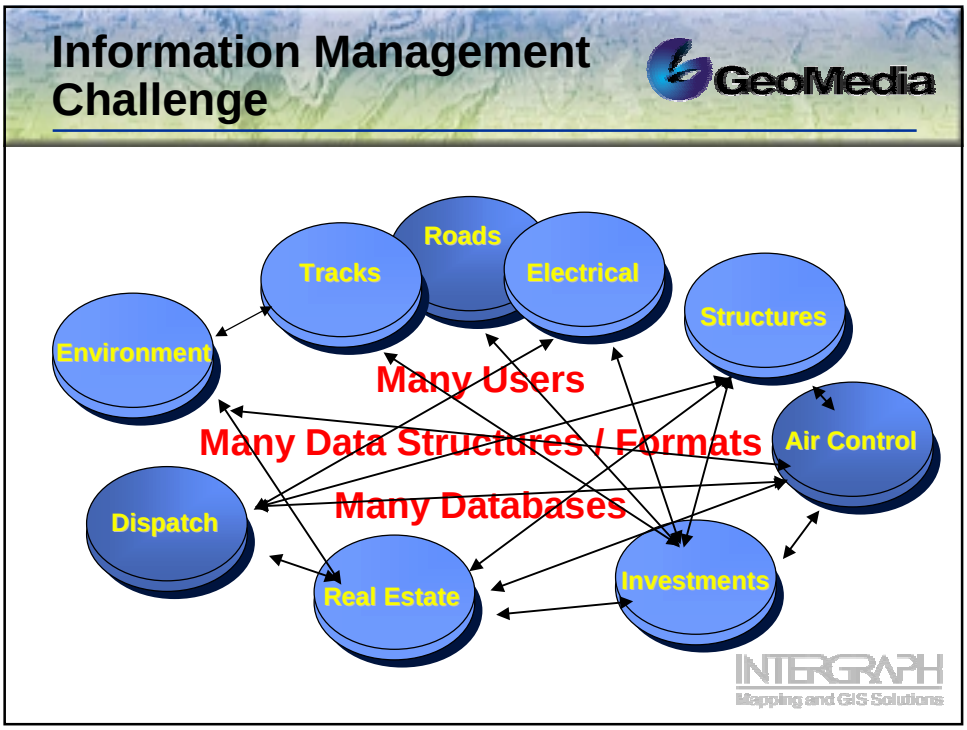
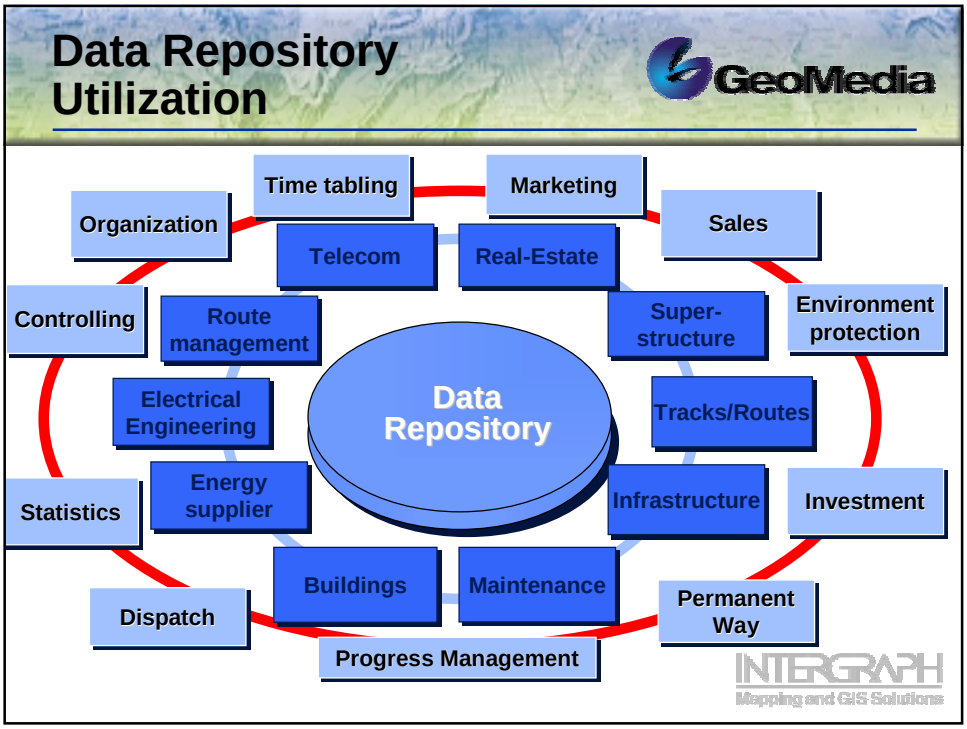
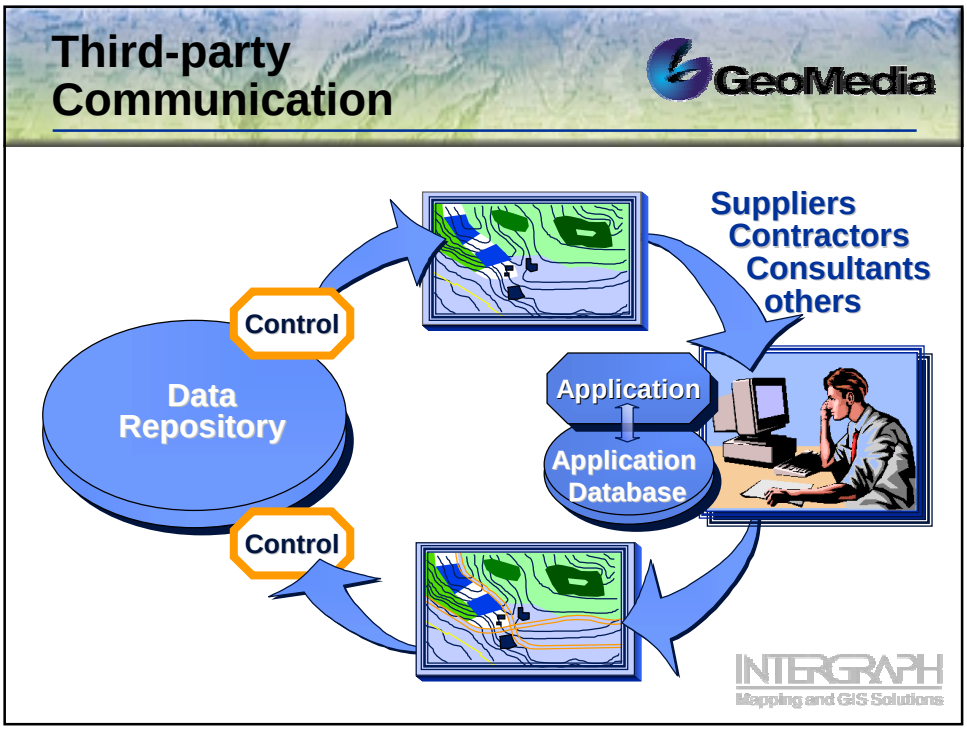

Transportation
Solution Approach
GeoMedia
$/data
Surveying
Department
Asset
Collection
Accounting
Department
Financial
Overview
Controlling
Department
P & L
Business
Management
Alliances /
Outsourcing
Enterprise / Holding
Management
Internet /
Mobile
Integration, Detail, Flexibility
Engineering
Costs
Standards
Market
Strategy
Technical
Analysis
Improvement
Planning
Investment
time
INTERGRAPH
Mapping and GIS Solutions


Information Management
Challenge
GeoMedia
Roads
Tracks
Electrical
Structures
Environment
Many Users
Many Data Structures / Formats
Air Control
Many Databases
Dispatch
Real Estate
Investments
INTERGRAPH
Mapping and GIS Solutions

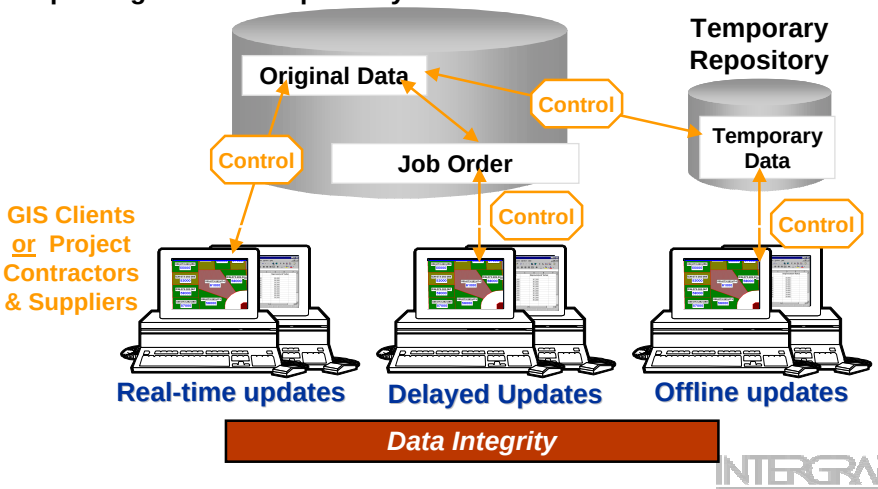

Data Repository Utilization
GeoMedia
Time tabling
Marketing
Organization
Sales
Telecom
Real-Estate
Controlling
Route management
Super-structure
Environment protection
Electrical Engineering
Data Repository
Tracks/Routes
Energy supplier
Infrastructure
Investment
Statistics
Buildings
Maintenance
Permanent Way
Dispatch
Progress Management
INTERGRAPH
Mapping and GIS Solutions


Third-party Communication
GeoMedia
Suppliers
Contractors
Consultants
others
Control
Data Repository
Application
Application Database
Control
INTERGRAPH
Mapping and GIS Solutions

Information Usage

GeoMedia

Updating the Data Repository



INTERGRAPH Mapping and GIS Solutions

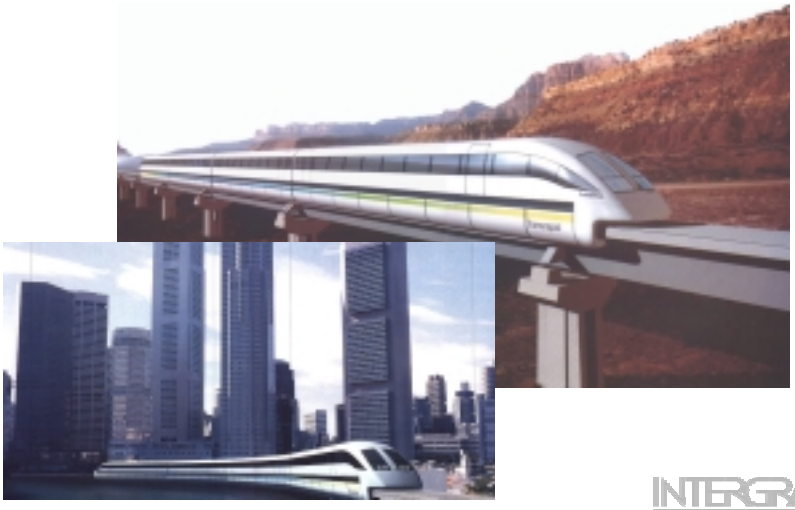
Transportation Location-based Service

GeoMedia

Mapping and GIS Solutions

Case 1 – Germany

GeoMedia



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Case 1 – Germany

GeoMedia

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Case 1 – German Rail: (DB AG)

GeoMedia

- **DB AG**

  - **40,000 km of track**
  - **over 200,000 employees**
  - **major re-organization**
  - **largest transportation company in Europe**

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Case 2 – Traffic Control

GeoMedia

Case 3 – Croatian Road Administration

GeoMedia

"Pavement and Bridge Management Information System“

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Case 3 – Croatian Road Administration

GeoMedia

- **Croatian Road Administration**
  Responsible for the
  management, administration and operation
  of the
  Croatian state roads

- **"Pavement and Bridge Management Information System“**
  Initiated by the
  Government of the Republic of Croatia
  based on a loan from the
  International Bank for Reconstruction and Development (World Bank)

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Case 3 – Croatian Road Administration

GeoMedia

- **Goals**

  Optimal management and operation of the
  Croatian road network
  for decongestion on networks, optimization of traffic flow and
  major enhancements of security

- **Project stages**

  Current stage -> GIS (*GeoMedia)* based technology
  Visualization of spatially referenced road network data
  Provision of decision support information to all levels of management

  Future stage -> Overall Road Industry Solution
  serving as a major reference within the total
  Southeastern Europe transportation area

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Case 3 – Croatian Road Administration

GeoMedia

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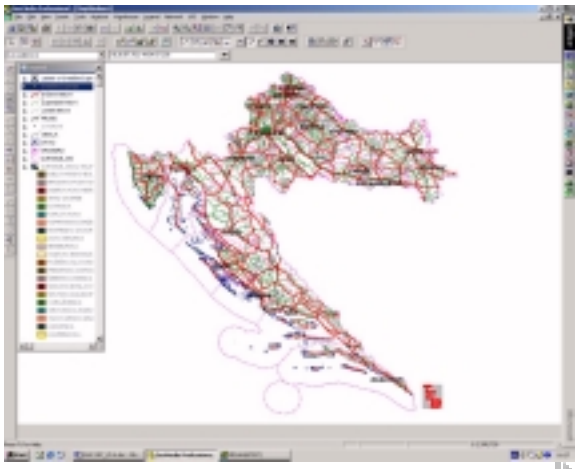
Case 3 – Croatian Road Administration

GeoMedia



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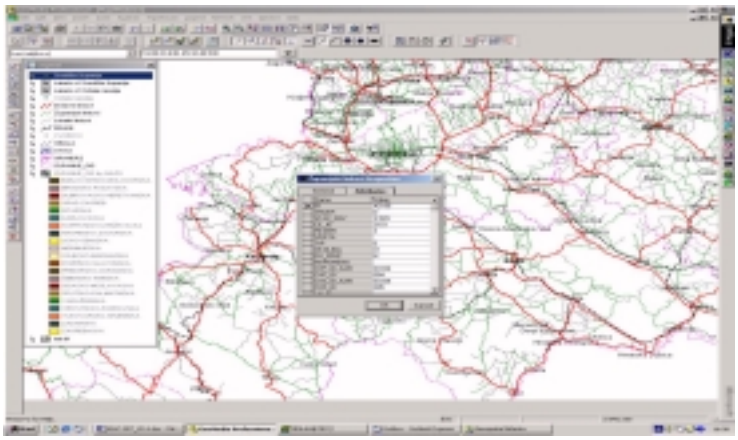
Case 3 – Croatian Road Administration

GeoMedia



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Case 4 – Romanian Railways

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Case 4 – Romanian Railways

- **Romanian Railways**

- Fourth largest railway network in Europe
in terms of total line length and traffic volume

- Covers entire Romanian territory (14,220 km of track)

- Manages freight and passenger rail traffic and
administers the national railway infrastructure

- Ensures continuity of the European transportation system and
provides efficient connections with other transport systems
(road, river and sea)
as well as with Eastern Europe and the Middle East

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Case 4 – Romanian Railways

- **Responsibility**
  "CFR" S.A. (Compania Nationala de Cai Ferate)
  = Organization responsible for infrastructure and information technology (IT) at Romanian Railways

- **Infrastructure Asset Management System**
  - GeoRail (GeoMedia based Industry Rail Solution) integrated with maintenance system

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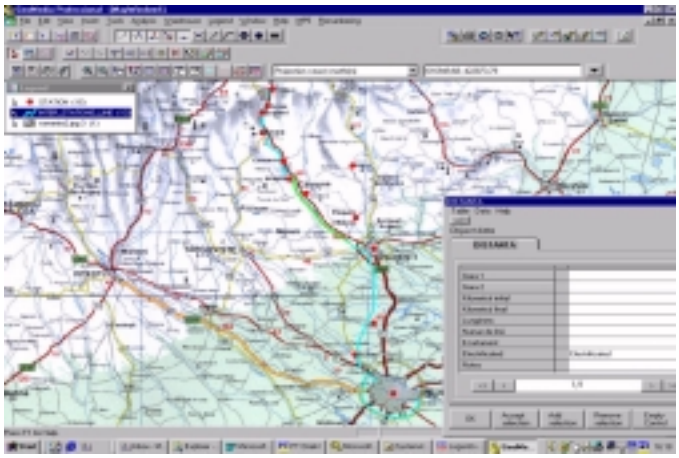
Case 4 – Romanian Railways



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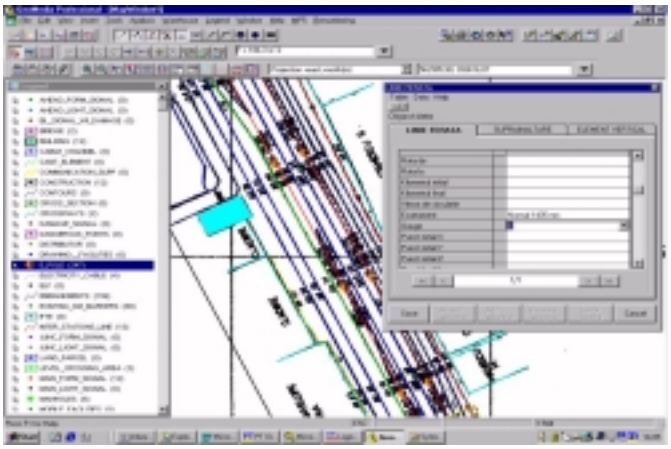
Case 4 – Romanian Railways



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